The following represents TVA's initial responses to request from David Meyer, DOE regarding:

Energy Policy Act of 2005, Section 1234
Economic Dispatch Study
Questions for Stakeholders

1. TVA performs the economic dispatch for the TVA service area (region). TVA sells to 158 distributors who use their distribution systems to provide service for more than eight million residential, commercial and industrial customers in seven states. In addition, TVA directly serves 62 large industries. TVA has a summer peak load of approximately 32,000 MW and a winter peak load of approximately 29,900 MW.

TVA uses a combination of system operator manually-controlled dispatch (based on incremental cost curves) and automatic generation control in its Energy Management System for economic dispatch. TVA is not a member of an ISO or RTO.

2. In general the Act's definition of economic dispatch is appropriate. Lowest cost is a forward projection based on load forecast, unit availability, generator cycle costs, interchange markets, generation required for reserves, generation required for regulation, etc. Additional dispatch factors that may be considered are load management programs.

The geographic scale or area {size} for economic dispatch is a balance between reliability and cost considerations. While larger geographic areas may have more diversity of both load and generation costs, it will depend upon the ability of the control agent to provide reliable service without adding overheads that will drive up cost.

TVA is not aware of other issues that should be included in economic dispatch to meet its obligation to serve other than cost and reliability.

3. For utility-owned generation (off cost curve), TVA can economically control the generation of those units used for

regulation. TVA has developed contracts with IPPs to provide automatic load frequency control. For most non-utility owned generation, generation is provided by interchange schedules of fixed generation for a specified period based on offered prices for blocks of energy, which is blended with utility-owned generation based on cost. In some cases, the need for generation regulation may override economics dispatch.

There are markets where non-utility generation is provided for base load, load follow, and regulation. By Federal law, TVA is not allowed to bid directly into those markets and, therefore, does not have any comments regarding operational practices differentiation due to tariff, or federal or state rules.

4. The use of non-utility {owned} generation within economic dispatch constraints is a function of the generator's cost, transmission availability, and the assessment of transmission risk. The change of any of these elements as compared to utility-owned generation and the market might lead to more non-utility generator dispatch. With the huge increases in natural gas cost, TVA feels this is a cost and reliability issue more than a process issue.

5. If economic dispatch within security and economic constraints resulted in greater dispatch and use of non-utility generation, there should be no negative impacts to the transmission system and costs should be optimized. Environmental impacts would be specific to the generator, fuel used, etc.

6. Economic dispatch looking at incremental cost alone could have negative grid reliability impacts. To minimize these impacts, utilities should use security constrained economic dispatch operating tools. In general, economic dispatch based on cost and reliability should not have any negative impacts on grid reliability.